Biometric Automated Toolset (BAT) and Handheld Interagency Identity Detection Equipment (HIIDE)

Overview for NIST XML & Mobile ID Workshop

Biometrics Task Force

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Biometrics Automated Toolset (BAT)

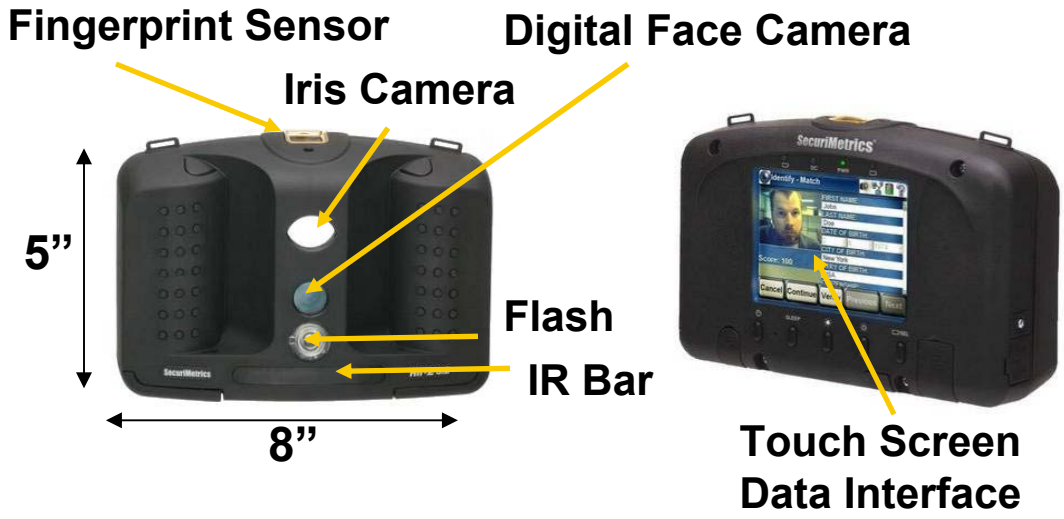
BAT Enrollment Station

Optional Equipment:

- 500GB Hard Drive 
- Badge Printer 
- Bar Code Scanner 

- **Function:** BAT collects fingerprints, iris scans, facial photos and biographical information of persons of interest into a searchable data base.
- **Scope:** Over 2,000 systems deployed; 560,000+ biometrics enrollments
- **Mission Threads**: Tactical Operations, Force Protection, Detainee Operations, Population Control, Base Access, IED Forensics Operations, Special Operations, and Local Hire Screening / Intelligence

Handheld Interagency Identity Detection Equipment (HIIDE)



HIIDE Characteristics:

- **Lightweight (2lbs, 3 oz)**
- **Multimodal collection and matching device**
- **Interoperable with BAT for biometrics data exchange back to DoD biometrics Data Repository**

- Function: HIIDE collects and matches fingerprints, iris images, facial photos and biographical contextual data of Persons of Interest against an internal database

- Scope: Planned total fielding of 6,664 devices to OIF, OEF, USMC, ISAF, and SOF; Future improvements include wireless, watchlist expansion, rolled print, improved search capabilities

- Mission Threads: Tactical Operations, Force Protection, Detainee Operations, Access Control, Special Operations, and Intelligence Operations

Requirements of Special Operations Community

Physical Design of Device

- Future mobile identification devices must be smaller, lighter, and faster
- Need to determine value of multimodal devices versus current reliance on fingerprints
  - If fingerprints are the best modality, are 4 prints sufficient?
  - What is the most effective platen size to achieve superior sample quality?

Performance

- Focused on identification of targets, not verification
  - Matches must be quick and accurate
  - Perform matches against entire authoritative database not just a watchlist
- Current systems architecture contains a web portal for managing matches

DoD Efforts to Fulfill Mobile ID Requirements

- DoD Mobile ID Requirements documentation being developed
  - JCIDS documentation (BAT CPD, SOID CDD, and Navy IDS)
  - Enterprise JUONS
  - JROCM Last Tactical Mile task
- Ongoing Architectural efforts will define Mobile ID capability in FOB, AOR/Corps/JFLCC, and Enterprise
- Development of system-level and operational metrics define success
  - System-level metrics: How are the systems performing in the field?
  - Operational metrics: Effectiveness of biometrics in meeting national strategic objectives
- Systems acquisition in progress:
  - Spiral Development of BAT and HIIDE Systems is ongoing
  - Potential development of PM Biometrics Family of Systems

Lessons Learned

- Current fielded mobile devices are working well and the Warfigher is pleased
- Need to define requirements upfront:
  - Purpose for the device (enroll vs. verify)
  - Level that mobile ID devices will be employed (individual, squad, company)
  - CONOPs are important to define use cases
- Small form factor system limitations:
  - Hardware, templates, and image quality affect the ability to populate and match within an internal database (watchlist)
  - Difficulty in synchronizing all mobile devices in an AOR
- Logistics/Lifecycle management
- Manage user expectations of the device
- Leaders must understand capability Portfolio Management to synchronize enterprise

Recommendations for Workshop

- Allow use of various sensor technologies to support Mobile ID requirements
- Standards/Profiles should be based on operational/performance capabilities
- Investigate interoperability/data sharing issues introduced with multiple “standards” for data collection
- Utilize use cases to identify and examine interoperability issues
- Provide a forum for all interested parties to demonstrate current state of technology & products

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BACK UP SLIDES

Improving Operational Capability

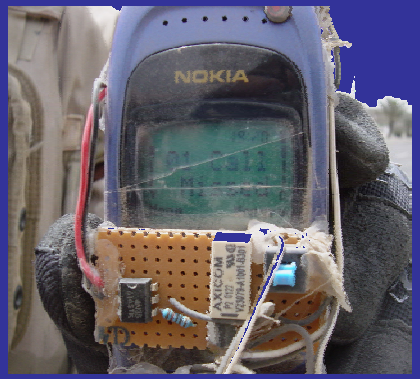
- Next Generation Enterprise Automated Biometric Identification System
  - Increases capacity and improves scalability
  - Decreases response time to user
  - Incorporates multi-modal biometrics capability for more accurate searches / matches
- Family of Systems development
  - Ruggedized, tactical biometrics systems and devices tailored for various mission sets
  - Fully interoperable with enterprise database and other systems
- DoD biometrics-enabled watchlist
  - Provides list of high-threat persons of interest available for searching on handheld devices, as well as from enterprise level
  - Interfaces with national watchlists

Biometrics Impacts

"Taking away the enemy's anonymity is one of the most powerful joint force capabilities for the Long War."
Admiral E. P. Giambastiani, VCJCS, 28 MAR 07

Significant Operational Statistics

- 1.5M+ Automated Biometric Identification System entries
- 240,764 Matches
- 167 IED Latent Matches
- 193 Non-IED related latent matches



Significant Intelligence Statistics

- 9,527 Terrorists on DoD Biometrics Watchlist
  - 1,153 Tier 1 (Detain if Encountered)
- Latent Prints Developed
  18,036 – Iraq
  4,169 – Afghanistan

- 9,001 Biometrics Intelligence Reports produced
- 1070 Insurgents put on Security Hold

DoD Biometrics Strategy